

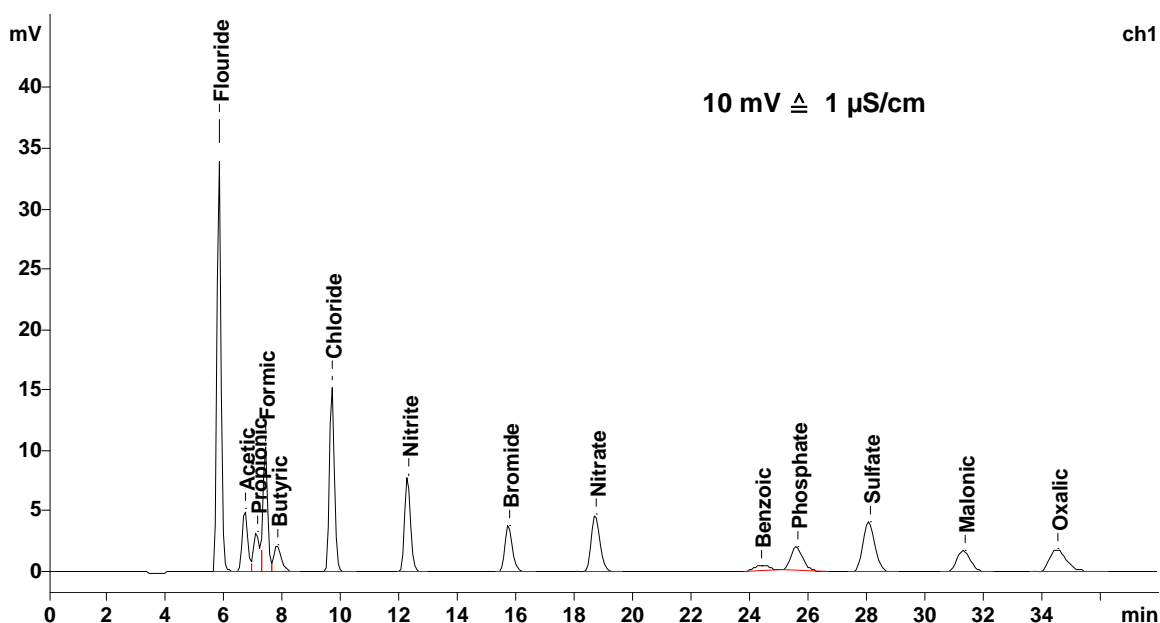
IC Application Note No. S-249

Title: 14 anions in an industrial process water

Summary: Determination of fluoride, acetate, propionate, formate, butyrate, chloride, nitrite, bromide, nitrate, benzoate, phosphate, sulfate, malonate and oxalate in an industrial process water using anion chromatography with conductivity detection after sequential suppression.

Sample: Petrochemical process water
Sample Preparation: Dilution 1:5 with ultrapure water, injection after Inline Ultrafiltration

Column: 6.1006.630 Metrosep A Supp 7 – 250
Eluent: 3.0 mmol/L sodium carbonate
Suppressor: Sequential suppression: MSM (100 mmol/L H₂SO₄), MCS
Flow: 1.0 mL/min **Temperature:** 45 °C
Injection Volume: 20 µL



Results:	Fluoride mg/L	Acetate mg/L	Propionate mg/L	Formate mg/L	Butyrate mg/L	Chloride mg/L	Nitrite mg/L
	9.98	10.04	9.65	9.21	10.13	9.63	8.64

Results:	Bromide mg/L	Nitrate mg/L	Benzoate mg/L	Phosphate mg/L	Sulfate mg/L	Malonate mg/L	Oxalate mg/L
	9.57	10.48	10.36	12.18	9.62	9.81	6.70